3.10 Drainage

GOAL 1001

Monroe County shall provide a stormwater management system which protects real and personal properties, and which promotes and protects ground and nearshore water quality. [9J-5.011(2)(a)]

Objective 1001.1

Monroe County shall ensure that at the time a development permit is issued, adequate stormwater management facilities are available to support the development at the adopted level of service standards concurrent with the impacts of such development. [9J-5.011(2)(b)1]

Policy 1001.1.1

Water Quality Level of Service Standards - Minimum Water Quality:

- 1. All projects shall be designed so that the discharges will meet Florida State Water Quality Standards as set forth in Chapters 17-25 and 17-302, F.A.C, incorporated herein by reference. In addition, all projects shall include an additional 50% of the water quality treatment specified below, which shall be calculated by multiplying the volumes obtained in Section (a) by a factor of 1.5, Retention/Detention Criteria (SFWMD Water Quality Criteria 3.2.2.2):
 - a) Retention and/or detention in the overall system, including swales, lakes, canals, greenways, etc., shall be provided for one of the three following criteria or equivalent combinations thereof:
 - (1) Wet detention volume shall be provided for the first inch of runoff from the developed project, or the total runoff of 2.5 inches times the percentage of imperviousness, whichever is greater.
 - (2) Dry detention volume shall be provided equal to 75 percent of the above amount computed for wet detention.
 - (3) Retention volume shall be provided equal to 50 percent of the above amounts computed for wet detention.
 - b) Infill residential development within improved residential areas or subdivisions existing prior to the adoption of this comprehensive plan must ensure that its post-development stormwater run-off will not contribute pollutants which will cause the runoff from the entire improved area or subdivision to degrade receiving water bodies and their water quality as stated above.

c) New Development and Redevelopment projects which are exempt from the South Florida Water Management District permitting process shall also meet the requirements of Chapter 40-4 and 40E-40, F.A.C.

Policy 1001.1.2

By January 4, 1997, Monroe County shall adopt Land Development Regulations which provide a Concurrency Management System (see Capital Improvements Policy 1401.4.5). The Concurrency Management System shall ensure that no permits will be issued for new development unless adequate stormwater management facilities needed to support the development at the adopted level of service standards are available concurrent with the impacts of development. [9J-5.011(2)(c)2]

Policy 1001.1.3

By January 4, 1997, Monroe County shall adopt a Stormwater Management Ordinance which establishes level of service standards for the quality and quantity of stormwater discharges for single family residential development and redevelopment which utilizes Best Management Practices and Design Guidelines in their implementation (see Natural Groundwater Aquifer Recharge Policy 1101.2.4).

Policy 1001.1.4

By January 4, 1997, in conjunction with the adoption of the Stormwater Management Ordinance, all improvements for replacement, expansion or increase in capacity of drainage facilities shall conform to the adopted level of service criteria for new development. [9J-5.011(2)(c)1]

Policy 1001.1.5

By January 4, 1997, Monroe County shall adopt Land Development Regulations which ensure county review of all development permits for compliance with adopted stormwater management design criteria prior to approval by the issuing agency. [9J-5.011(2)(c)1]

Policy 1001.1.6

By January 4, 1998, in conjunction with the development of the Stormwater Management Master Plan, Monroe County shall complete an inventory and analysis of existing public and private drainage facilities within the County. (See Objective 1001.3 and related policies) [9J-5.011(2)(c)1] Note: Monroe County recognizes its obligations under the stipulated settlement agreement but practicality of timeframe implementations may require modifications of agreement date premises.

Policy 1001.1.7

By January 4, 1997, Monroe County shall work with the SFWMD through the existing interlocal agreement to adopt and implement appropriate stormwater quality evaluation and estimation criteria and techniques for incorporation into the County's Stormwater Management Ordinance and Land Development Regulations. [9J-5.011(2)(c)4]

Objective 1001.2

The County shall maintain a five-year schedule of capital improvement needs for drainage facilities as part of the County Capital Improvements Program. This program shall be updated annually

consistent with Capital Improvements Policy 1401.1.2 and in conjunction with the County's annual budget process to ensure economic feasibility. [9J-5.011(2)(b)1; 9J-5.011(2)(b)2]

Policy 1001.2.1

Proposed stormwater capital improvements projects shall be evaluated and ranked according to the following priority level guidelines, with special attention to the position of the project in the Monroe County Seven Year Road Plan:

Level One - Whether the project is needed to protect public health and safety, to fulfill the County's legal commitment to provide facilities and services, to protect sensitive environmental areas from documented or anticipated adverse impacts, or to preserve or achieve full use of existing facilities.

Level Two - Whether the project increases efficiency of use of existing facilities, prevents or reduces future improvement costs, provides service to developed areas lacking full service, or promotes infill development.

Level Three - Whether the project represents a logical extension of facilities and services within a designated service area. [9J-5.011(2)(c)1]

Policy 1001.2.2

Projects needed to correct existing deficiencies shall be given priority in the formulation and implementation of the annual work program for the responsible County department. Specific priority will be given to those existing drainage problems which are determined to have the greatest adverse effect on groundwater and nearshore waters or areas designated as Outstanding Florida Waters. [9J-5.011(2)(c)1]

Objective 1001.3

By January 4, 1998, Monroe County, in coordination with SFWMD and DER, shall complete a comprehensive Stormwater Management Master Plan which ensures that stormwater management facilities are developed to attain adopted levels of service for all existing and proposed land uses. [9J-5.011(2)(c)1 and 5] Note: Monroe County recognizes its obligations under the stipulated settlement agreement but practicality of timeframe implementations may require modifications of agreement date premises.

Policy 1001.3.1

By January 4, 1998, Monroe County, in coordination with the SFWMD and DER, shall complete a detailed engineering study of drainage in the unincorporated sections of the Florida Keys. Funding for the development of the Stormwater Management Master Plan shall be identified by January 4, 1997, and shall be incorporated into the Capital Improvements Element. This study shall include an inventory of stormwater conveyance, treatment and discharge systems, both natural and manmade, and the capacity, treatment efficiency, and estimated pollutant loading of each system. The effects of pollutant loading, including the effects on freshwater lenses and recharge areas, will also be assessed. The study shall consider the unique hydrogeological characteristics of the Keys, and their effects on stormwater runoff and pollutant loading. Upon completion of the Stormwater Management Plan, Monroe County shall amend the comprehensive plan to include implementation of the recommendations contained in the Management Plan. [9J-

5.011(2)(c)1.4 and 5] Note: Monroe County recognizes its obligations under the stipulated settlement agreement but practicality of timeframe implementations require modifications of agreement date premises.

Policy 1001.3.2

By the effective date of this Plan, Monroe County shall enter into an agreement with EPA, DER, SFWMD and NOAA regarding the scope of studies required to document pollutant loads from stormwater runoff from the Florida Keys into surrounding waters. These studies shall be executed according to the terms of the agreement, in coordination with the Water Quality Protection Program for the Florida Keys National Marine Sanctuary. Upon execution of this agreement, the scope of the Stormwater Management Master Plan shall be adjusted accordingly. (See Conservation and Coastal Management Policy 202.1.1.) [9J-5.011(2)(c)1,4 and 5; 9J-5.012(3)(c)1,3 and 13; 9J-5.013(2)(c)1]

Policy 1001.3.3

By January 4, 1998, the County shall evaluate the performance of stormwater management systems which are to be installed in accordance with the Stormwater Management Ordinance. This performance evaluation will be based upon physical sampling and analysis of the discharge water of these structures. [9J-5.011(2)(c)4]

Objective 1001.4

By January 4, 1998, Monroe County shall coordinate with the appropriate regional agencies and adjacent local governments to address regional drainage issues. [9J-5.011(2)(b)2]

Policy 1001.4.1

Monroe County shall, as necessary, enter into interlocal agreements with Dade, Broward and Collier Counties, and with agencies having regional oversight over drainage issues, such as SFWMD and the ACOE. These agreements shall be designed to:

- 1. protect the functions of natural drainage features that impact the quality of the waters surrounding the Florida Keys; and
- 2. coordinate the extension or increase in capacity of any interjurisdictional drainage facilities which are necessary to meet the future needs of Monroe County. [9J-5.011(2)(c)4]

Policy 1001.4.2

Prior to any revision of drainage policies and ordinances, Monroe County shall meet with the SFWMD and the SFRPC to ensure that the local regulatory framework is consistent with the planning objectives and regulations of the region.